

REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Status of Claims:

No claims are currently being canceled or added.

Claim 5 is currently being amended to correct a typographical error.

This amendment amends a claim in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claims remain under examination in the application, is presented, with an appropriate defined status identifier.

After amending the claims as set forth above, claims 1-20 remain pending in this application.

Request for Entry of After-final Amendment and Reply:

It is respectfully requested that this after-final Amendment and Reply be considered and entered, since it is believed to place this application in condition for allowance without requiring further search (since the scope of the claims have not been changed).

Objection to Claim 5:

In the Office Action, claim 5 was objected to because of a minor informality noted on page 3 of the Office Action. By way of this amendment and reply, claim 5 has been amended to correct that informality.

Claim Rejections – Prior Art:

In the Office Action, claims 1-3, 5, 8, 12 and 15 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,557,780 to Edwards et al.; claims 4, 7, 11 and 14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Edwards et al. in view of U.S. Patent No. 6,738,975 to Yee al. and further in view of U.S. Patent No. 6,871,331 to Bloom et al.; claims 6, 9, 10 and 13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Edwards et al. in view of U.S. Patent Publication No. 2003/0135584 to Roberts; and claims 16-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Edwards et al. in view of U.S. Patent No. 6,598,046 to Goldberg et al. These rejections are traversed for the reasons given below.

Figure 15 of Edwards, as explained in column 11, lines 51-67 of Edwards, describes a methodology by which a class of transaction is automatically mapped into an EDI standard of another class of transaction. For example, a purchase order transaction is automatically mapped into a purchase order acknowledgement. To do this, mapping of segments is made from an EDI standard format into a new format, according to an EDI document cross-reference file 154.

The above-referenced portion of Edwards does not disclose or suggest the use of maps for mapping metadata of source documents to variables of a virtual document. Rather, it discloses the mapping of portions of a source document in one format to portions of a target document in another format. No discussion of metadata or variables of a virtual document is disclosed or suggested by Edwards. In fact, the term “metadata” is not even mentioned in Edwards, since it does not utilize metadata in any way, shape or form. Rather, Edwards determines ‘segments’ of a source document based on segment terminators and element separator characters in a source document, and operates on those segments, as described in column 8, lines 39-44 of Edwards.

To put it another way, Edwards provides a system that creates another document, such as a Purchase Order Acknowledgement, automatically from a document that has been received, such as a Purchase Order sent from a client. Edwards does not perform any mapping from metadata of a source document to variables of a virtual document, and Edwards does not perform any mapping from variables of the virtual document to a target document. Rather, Edwards does a direct conversion of a source document to a target document, based on “segment mapping” of the source document to the target document.

The fact that Edwards teaches loading maps for mapping, as mentioned on page 3 of the Office Action, does not meet the specific claim features recited in claim 1, whereby metadata of different types of source documents are mapped to variables of a virtual document, and whereby the variables of the virtual document are mapped to metadata of a particular type of target document.

Accordingly, claims 1-3, 5, 8, 12 and 15 are not anticipated by Edwards.

With respect to dependent claim 2, it recites that a source message or document is translated to obtain its corresponding metadata. It is noted that Figure 2 of Edwards discloses an inbound transaction translator 32, which is also described in more detail in Figure 3 of

Edwards. However, as described in column 4, lines 58-67 of Edwards, the inbound transaction translator 32 determines which EDI standard to incoming data relies on, and then translates the data from the incoming format to an in-house standard format called “internal system format”, which can be used to display, print, store or modify the transaction. Such a format-to-format translator does not correspond to the translation of a source message or document to obtain its corresponding metadata, since no format translation is being made in that instance, but rather an extraction process is being performed.

Accordingly, claim 2 is patentable for this additional reason, beyond the reasons provided above with respect to its base claim 1.

In its rejection of claims 4, 7, 11 and 14 based on the combination of Edwards, Yee and Bloom, the Office Action asserts that Figure 4 and column 8, lines 15-27 of Edwards discloses that variables of a virtual document are assigned semantic names representative of a type of data to be assigned to the variables. Applicants respectfully disagree. Column 8, lines 15-27 of Edwards merely describes that segments and their order in a document are determined, and stored in a segment name table file 62, whereby a type of document can then be determined. Thus, if a received document has a particular segment structure that is similar to a purchase order, it is determined to be purchase order (e.g., has a particular product order segment structure). This has nothing at all to do with the assignment of semantic names representative of a type of data to variables of a virtual document.

Furthermore, the Office Action asserts that Bloom teaches mapping based on data and names, in column 3, lines 42-45 and column 4, lines 59-61 of Bloom. Applicants respectfully disagree, with respect to the specific features recited in claims 4, 7, 11 and 14. In particular, as recited in these claims, a user creates a map based on an intuitive correspondence made by the user from a particular metadata name of a source data model and a particular semantic name of a variable of the virtual document. At best, Bloom, which is directed to a totally different area of a combined data waveform and data entry apparatus for facilitating fast behavioral verification of digital hardware designs, performs automatic signal name remapping based on their name, mode and data type. No comparison (and certainly no intuitive comparison) is made by a user, or by a computer for that matter, in the system of Bloom, with respect to semantic names of virtual document variables and metadata names of a source data model.

Accordingly, claims 4, 7, 11 and 14 are patentable over the combined teachings of Edwards, Bloom, and Yee, for the reasons provided above.

Lastly, with respect to claims 16-20, the Office Action relies on Goldberg for teachings the features recited in those claims, but Applicants respectfully disagree. In Goldberg, metadata tags and values of source documents are compared to predetermined metadata tags and values stored in a database, in order to extract documents of interest. Thus, if seven documents are stored in the system and only two of those documents correspond to personal taxpayer documents, the system of Goldberg can extract those two desired documents. This has nothing at all with providing predetermined values for at least one of the metadata of a target data model, as recited in claims 16-20, but rather it merely discloses the comparison of metadata values of source documents with metadata values stored in a database, whereby no inputting of the stored metadata values into a target document is taught or suggested by Goldberg.

Accordingly, since Edwards does not rectify the above-mentioned shortcomings of Goldberg, claims 16-20 are patentable over the combination of Edwards and Goldberg.

Conclusion:

Since all of the issues raised in the Office Action have been addressed in this Amendment and Reply, Applicants believe that the present application is now in condition for allowance, and an early indication of allowance is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741.

If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicants hereby petition for such extension under 37 C.F.R. §1.136 and authorize payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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